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English Version

Synthetic sport systems - Leaching test

Systèmes sportifs synthétiques - Essai de lixiviation

Synthetische Sportsysteme - Auslaugungsprüfung

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Foreword

This document (CEN/TS 16384:2012) has been prepared by Technical Committee CEN/TC 217 "Sport surfaces", the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Introduction

To respond to the needs of buyers, end users and installers of synthetic sport systems for outdoor as well as to respond to the needs of producers of granulate as system constituents, CEN/TC 217 Working Group "Environmental Aspects" (WG 10) has worked on the following principles:

Firstly, define a laboratory test designed to assess the release of substances in ground water from a complete **"synthetic sport system for outdoor"**. The method of this test is based on the principle of large-scale in-situ tests (lysimeters). This test uses a sample of a sport surface similar to the sample used for laboratory type tests and representative of the system that will be installed.

Secondly, make it possible for integrators to assess specific leaching characteristics of relevant components and anticipate the results of the above laboratory test, specifying testing standards for a relative leaching assessment of system's constituents of different origins or nature, for instance granules (see Annex A).

NOTE This Technical Specification is based on the available knowledge and expertise. It is expected that it will be used in a harmonised way by the European Laboratories during the first three-years period and that this will result in an extended experience. Based on such experience, it is expected that the Technical Specification could be improved and transformed into an EN standard.

This document includes one normative annex and one informative annex. Additional information will be found in a guidance document in preparation.

1 Scope

This Technical Specification specifies testing methods concerning the release from synthetic sport systems for outdoor of substances in ground water, surface water and drainage water by performing a dedicated leaching test on a sample of a **"synthetic sport" system for outdoor**.

In addition, this Technical Specification provides tools for a relative leaching assessment of system's components (e.g. granules) of different origin or nature.

This Technical Specification does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3696, *Water for analytical laboratory use – specification and test methods (ISO 3696)*

EN ISO 5667-3, *Water quality – Sampling – Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3)*

EN 12506, *Characterization of waste – Analysis of eluates – Determination of pH, As, Ba, Cd, Cl-, Co, Cr, Cr VI, Cu, Mo, Ni, NO₂-, Pb, total S, SO₄²⁻, V and Zn*

EN 13370, *Characterization of waste – Analysis of eluates – Determination of Ammonium, AOX, conductivity, Hg, phenol index, TOC, easily liberatable CN-, F-*

EN 14877, *Synthetic surfaces for outdoor sports areas – Specification*

EN 15330-1, *Surfaces for sports areas – Synthetic turf and needle-punched surfaces primarily designed for outdoor use – Part 1 : specification for synthetic turf*

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

3.1
synthetic sport system
system above groundwater level used as "synthetic sport" and incorporating all the components needed between the support layer and the atmosphere

4 Symbols and abbreviations

None